

100

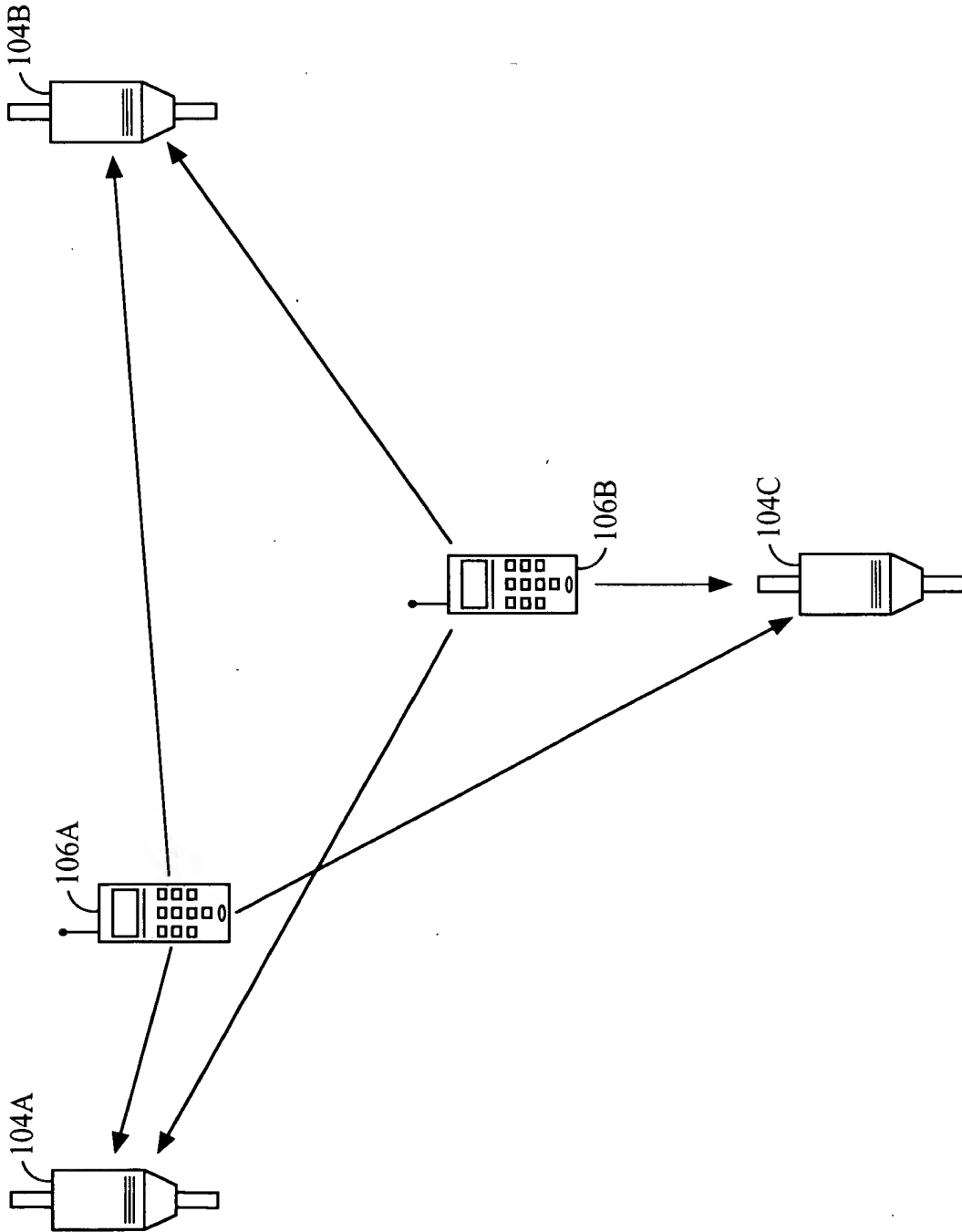
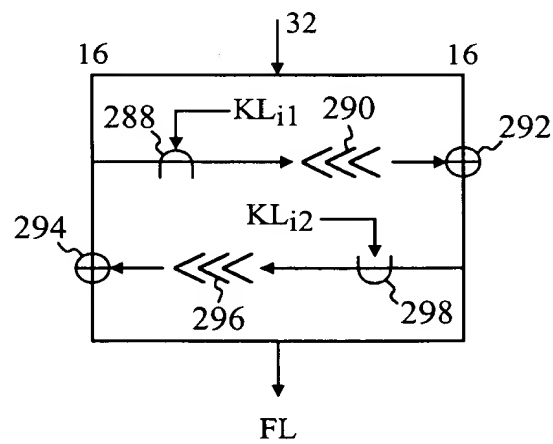
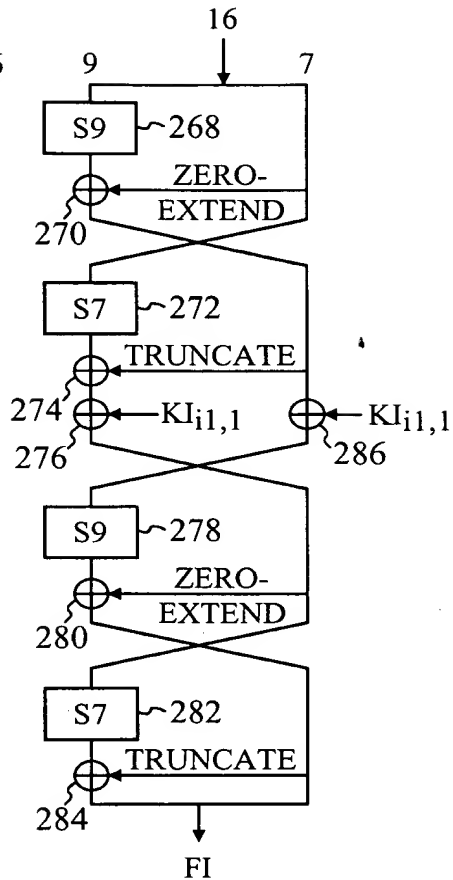
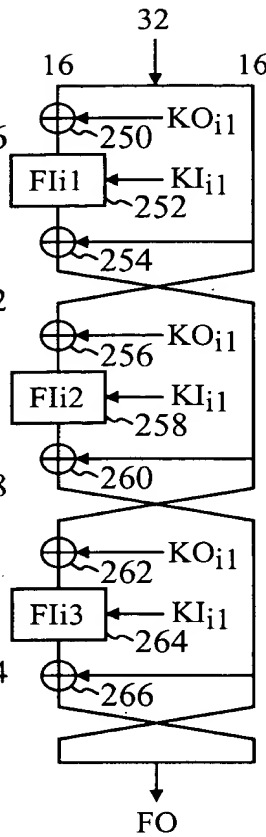
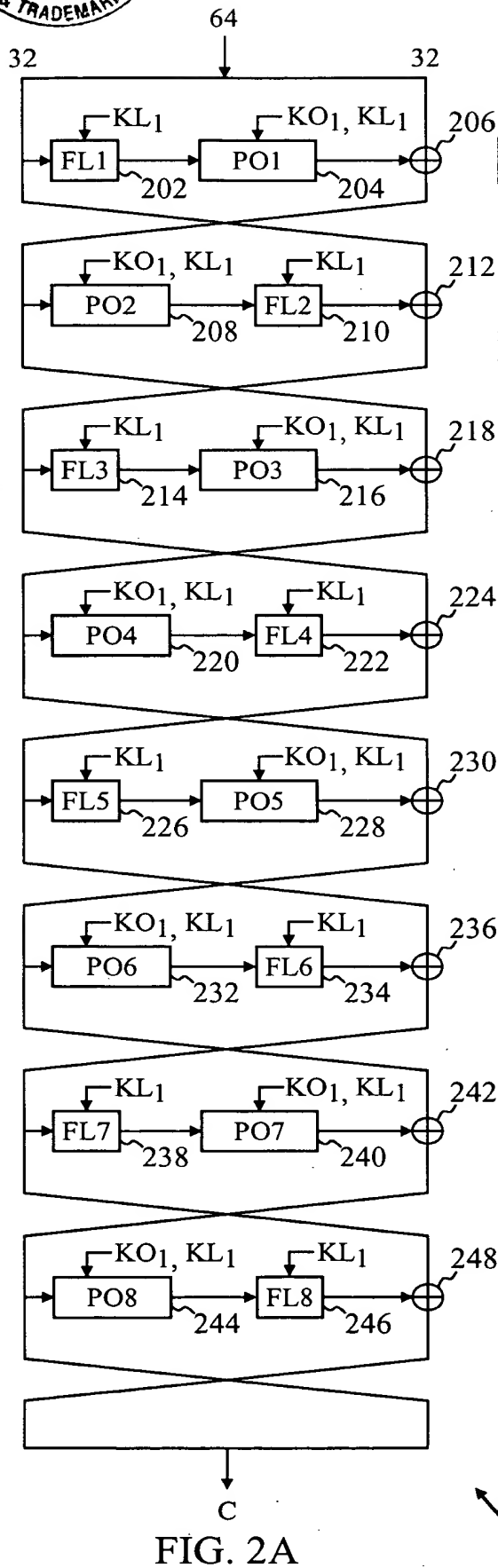





FIG. 1



 BITWISE AND OPERATION
 BITWISE OR OPERATION
 ONE BIT LEFT ROTATION

200

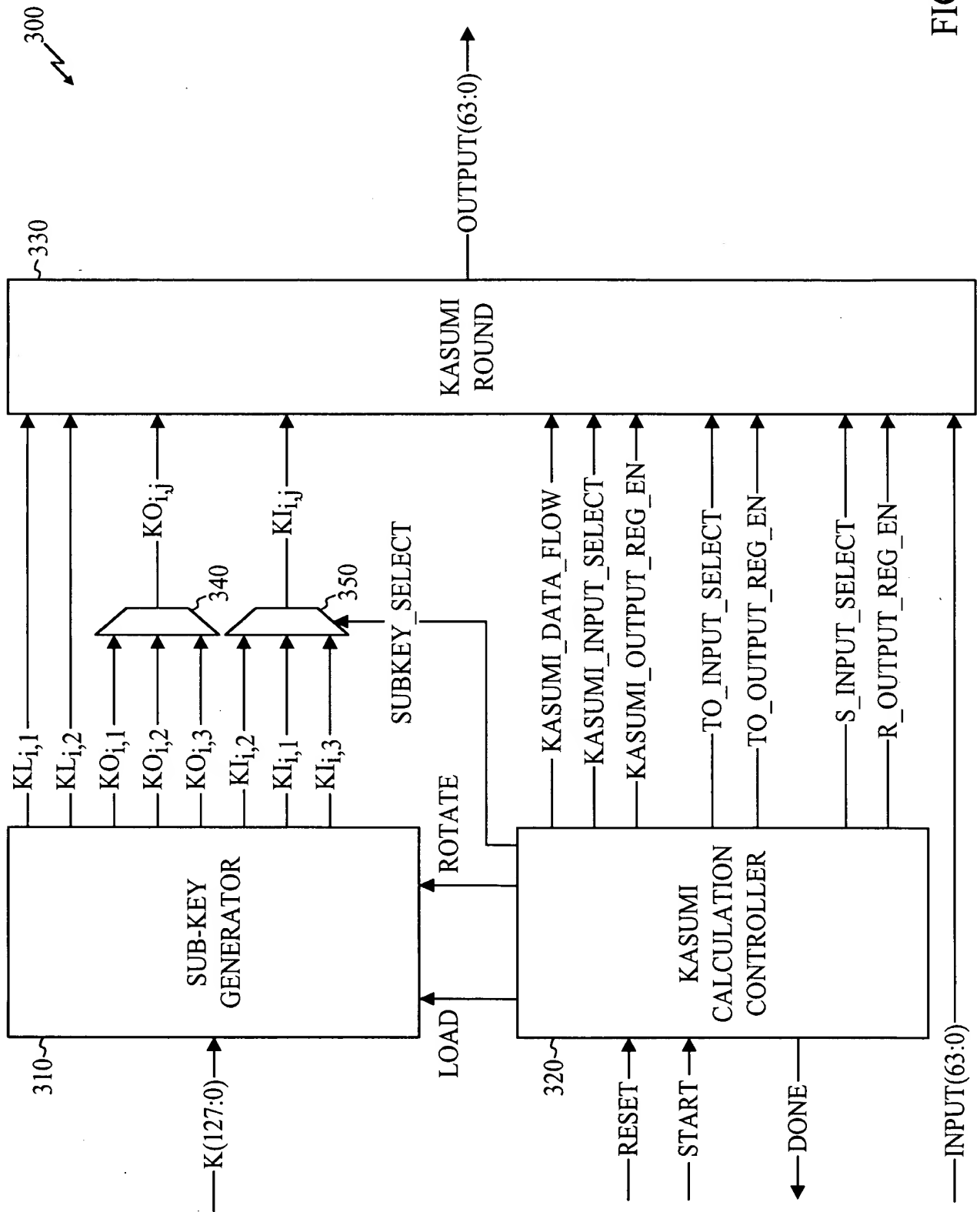
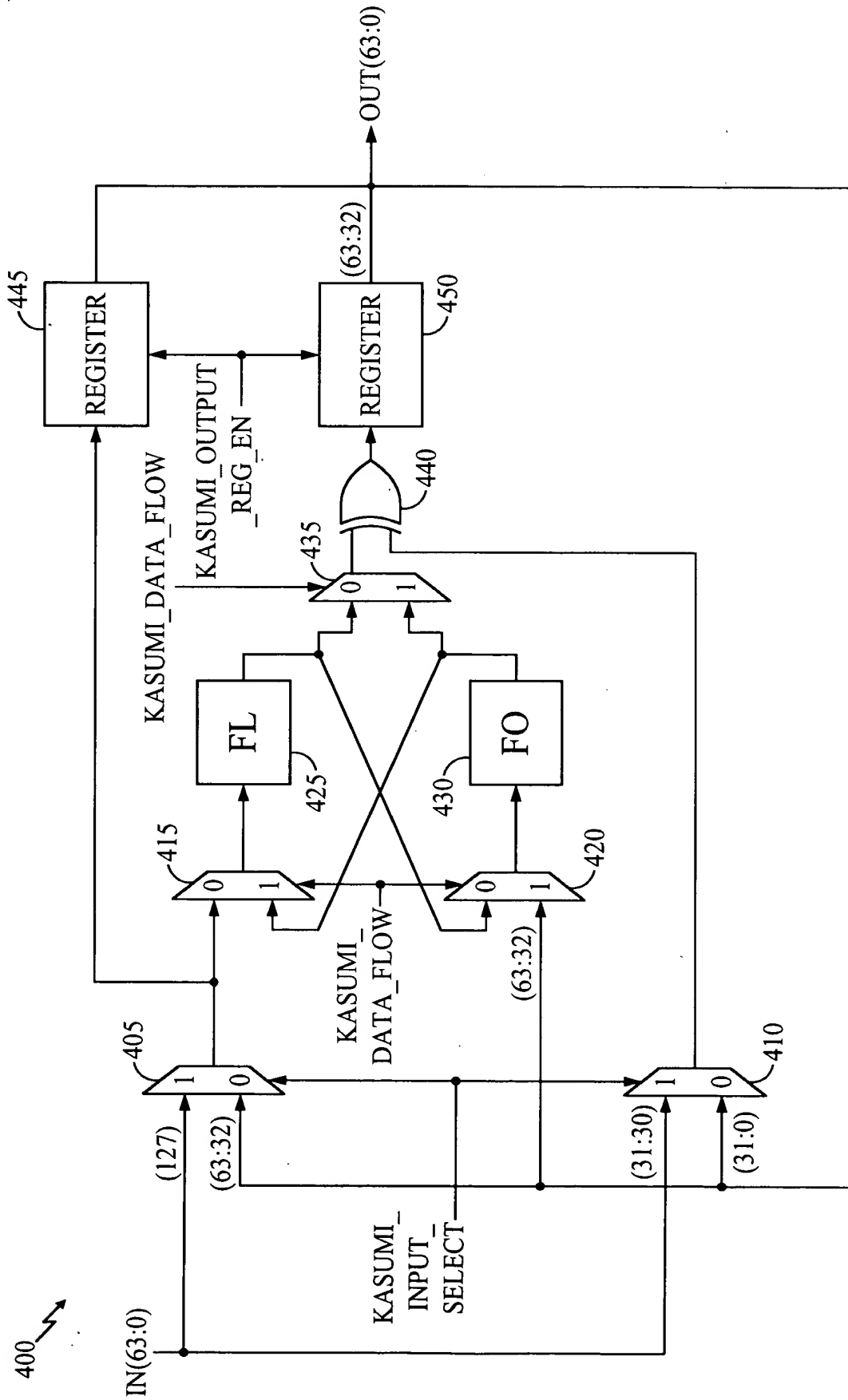
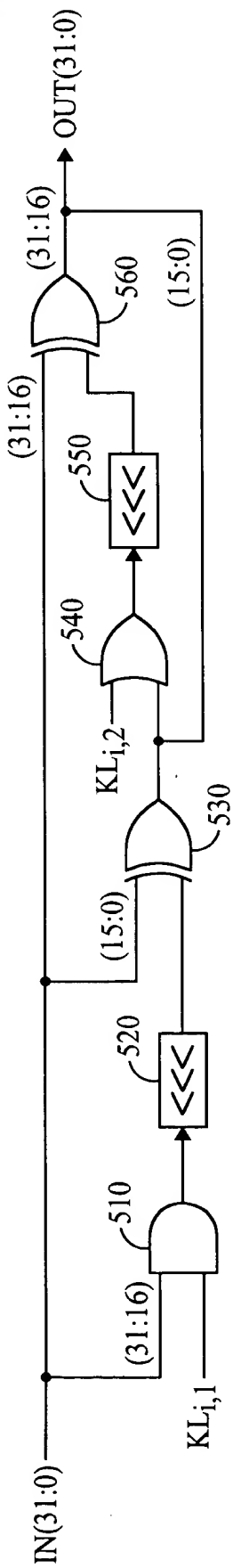


FIG. 3

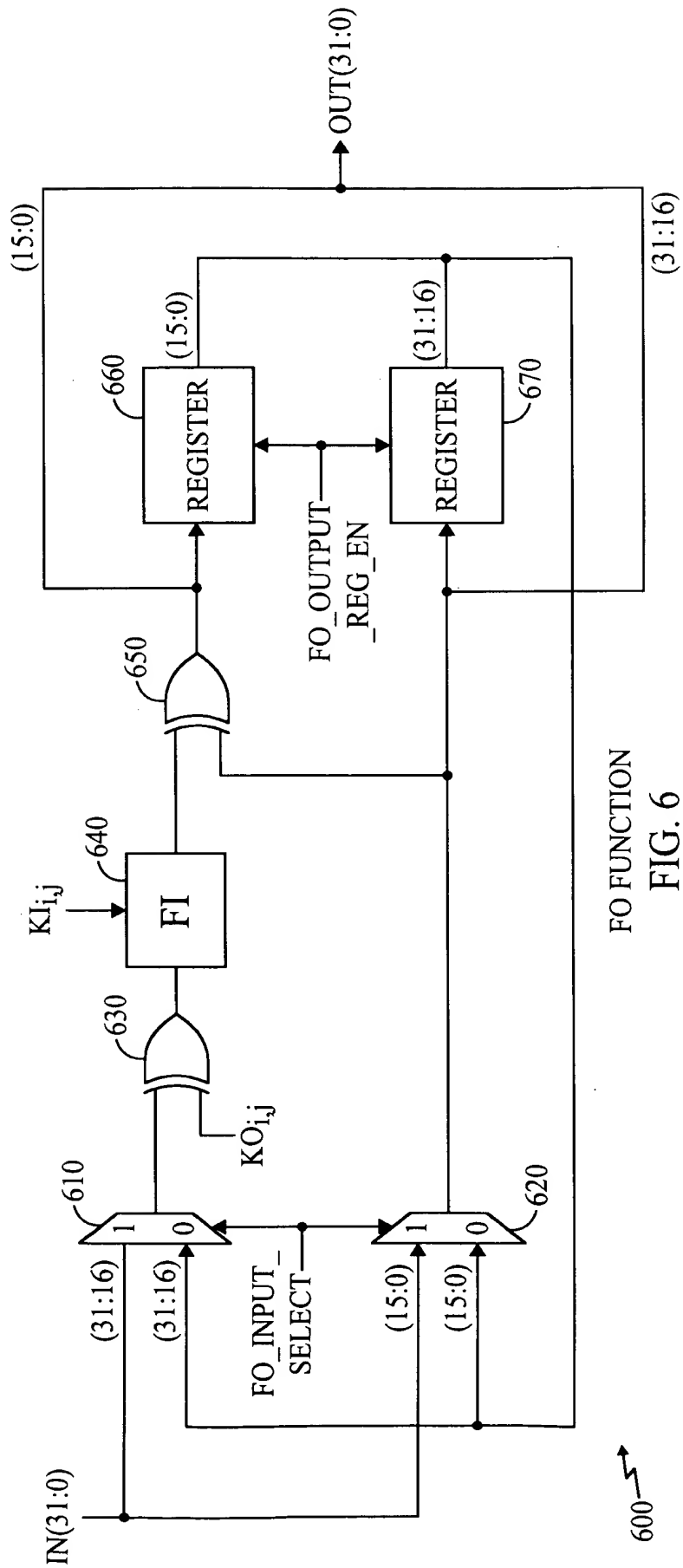


KASUMI ROUND

FIG. 4



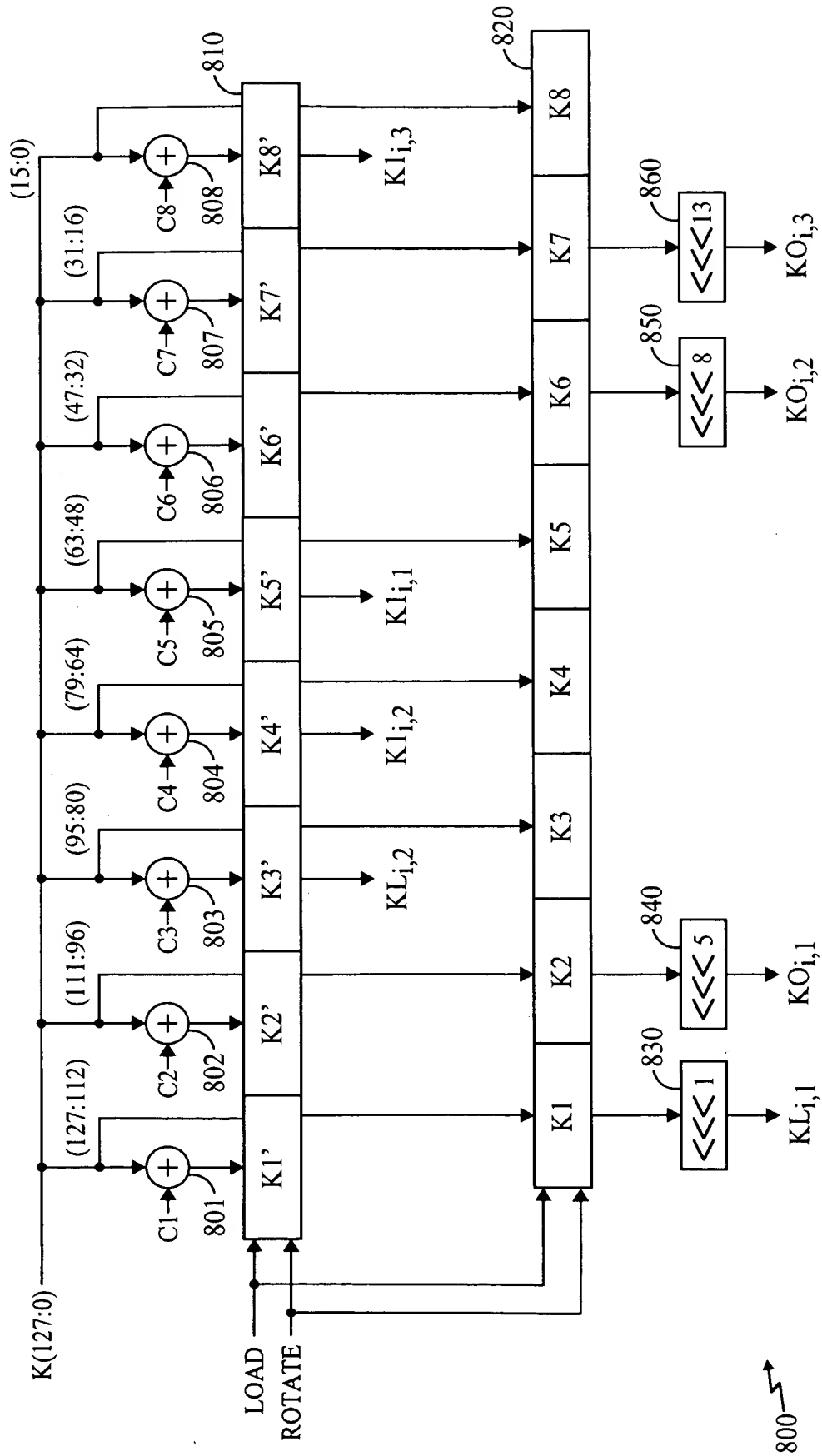
FL FUNCTION
FIG. 5



FO FUNCTION
FIG. 6



FIG. 7



SUB-KEY GENERATOR
FIG. 8

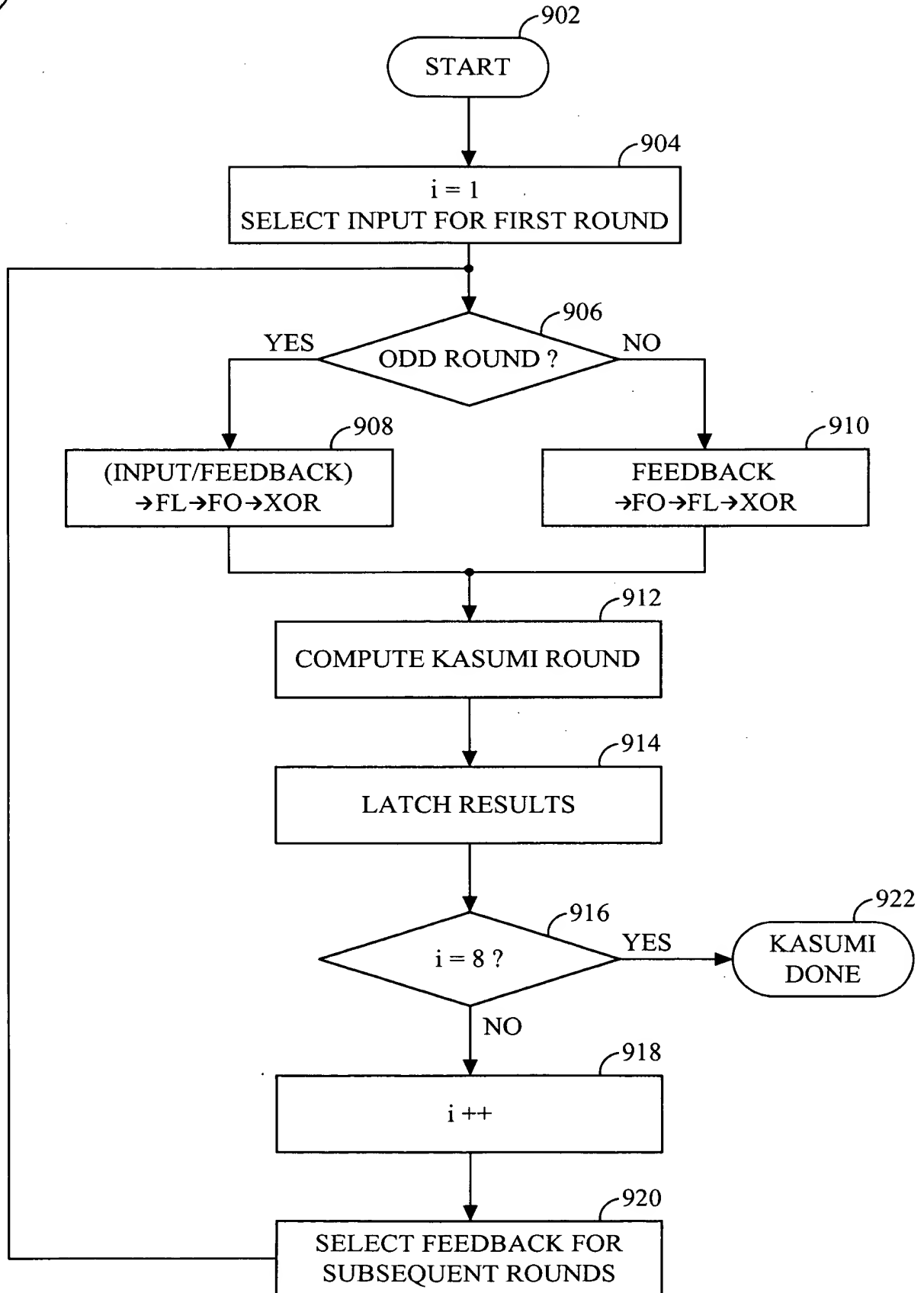


FIG. 9

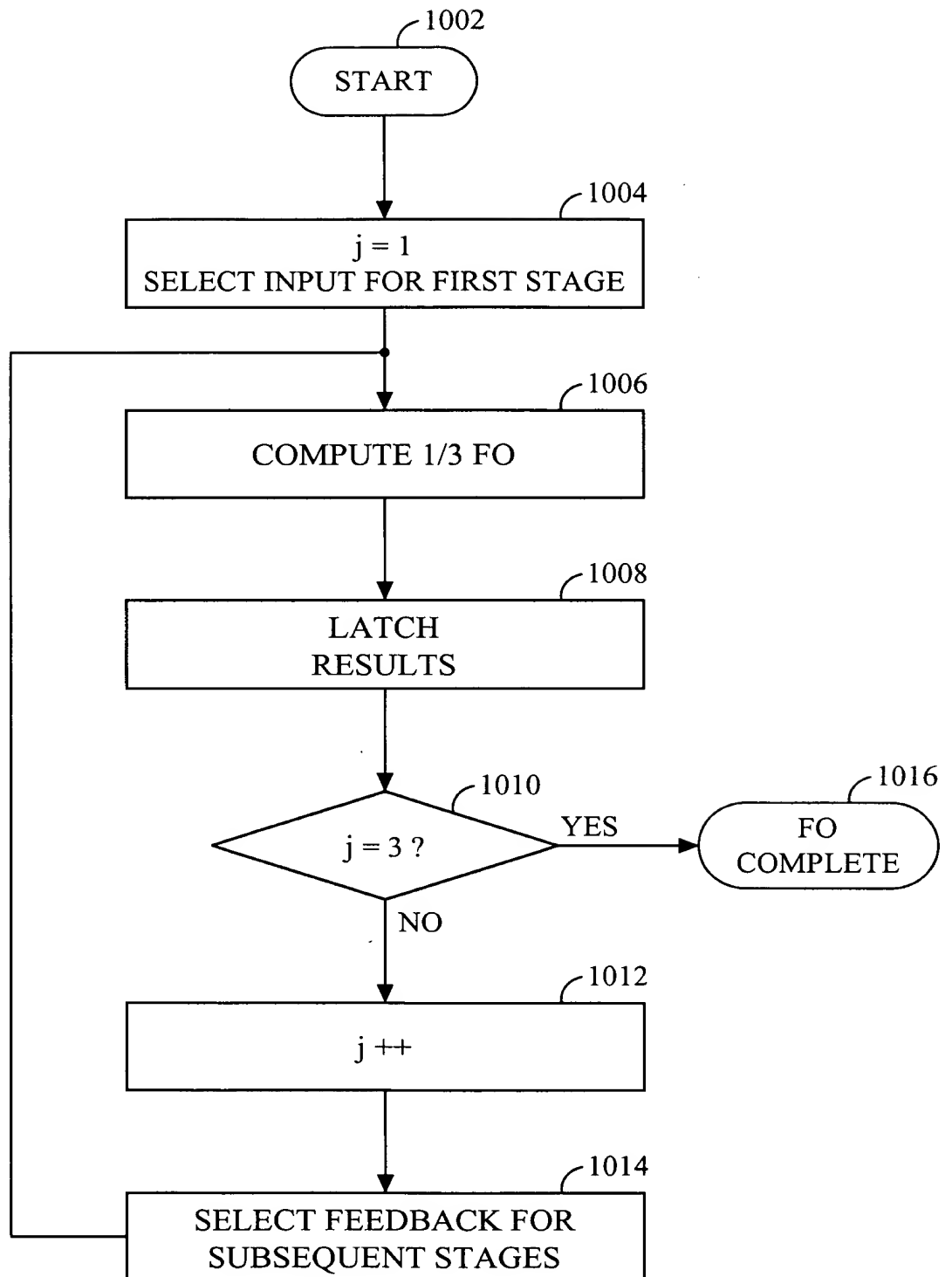


FIG. 10

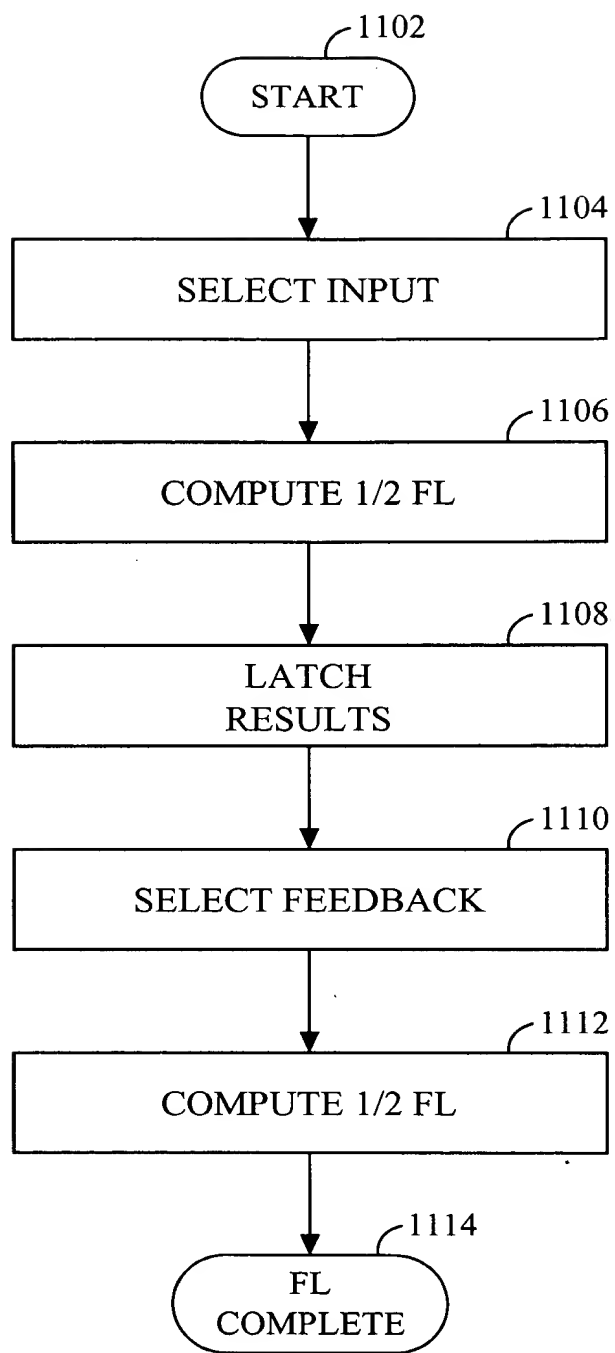


FIG. 11

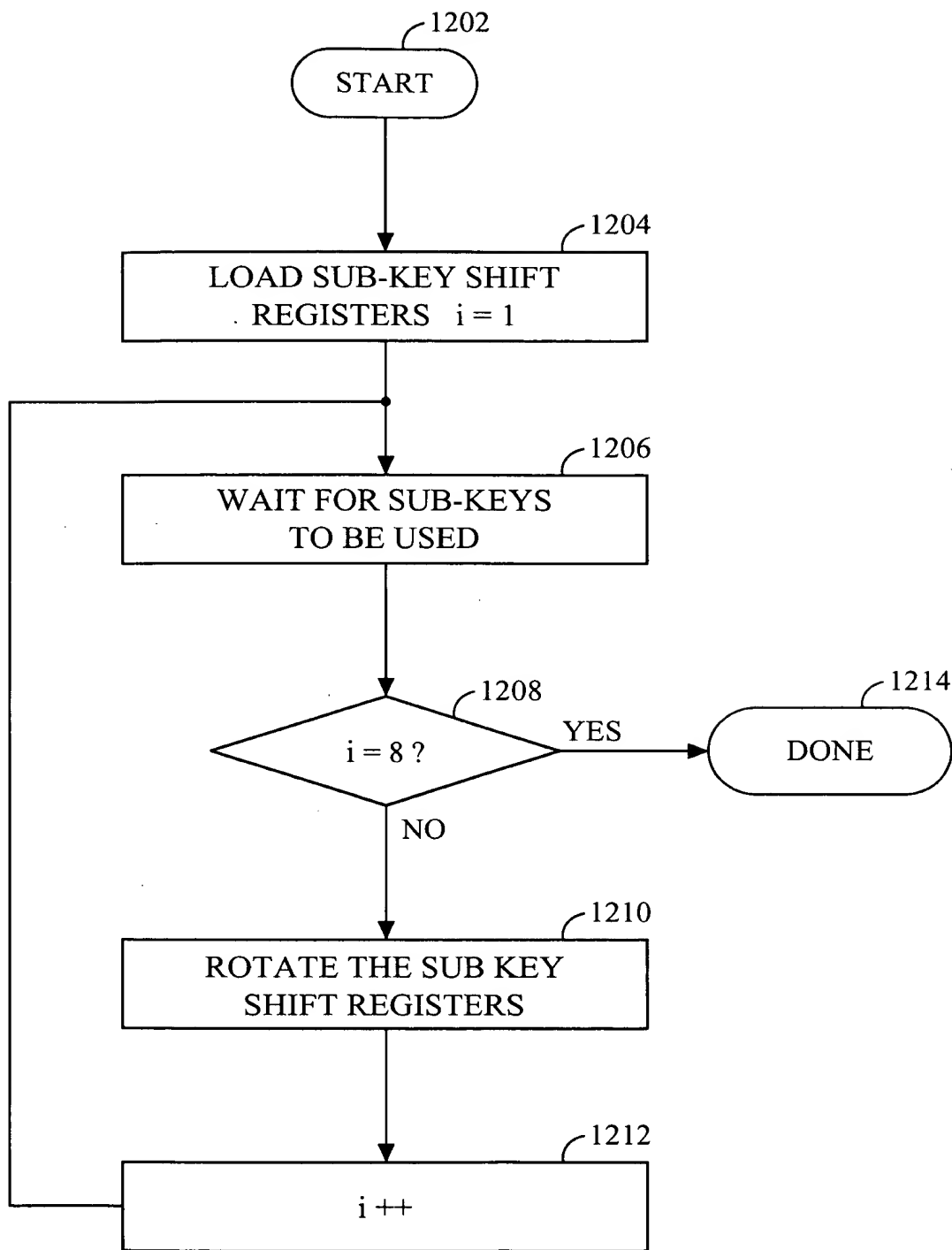


FIG. 12

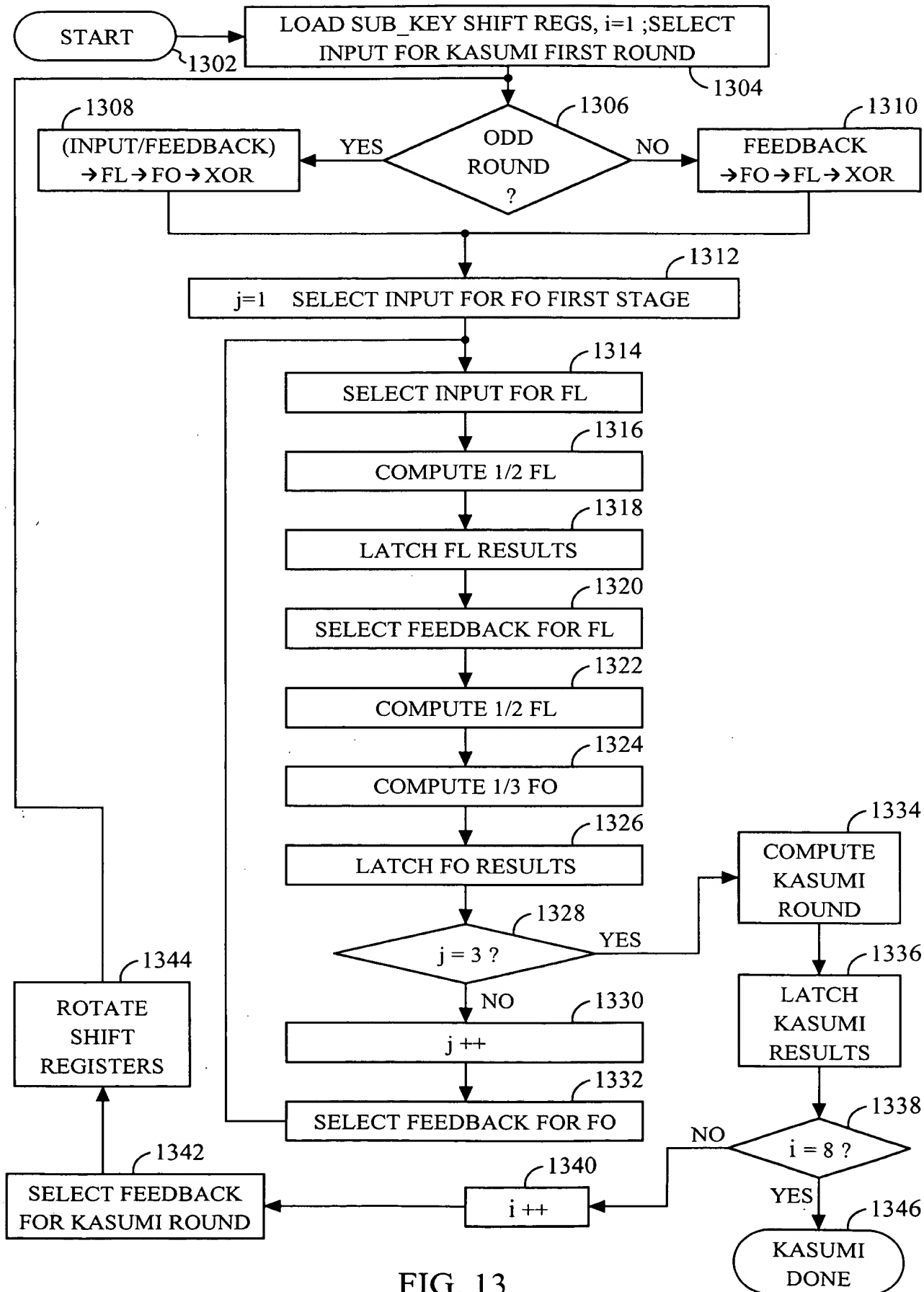


FIG. 13